

HIERACIUM CANADENSE, var. HIRTIRAMEUM Fernald in RHODORA, xvii. 19 (1915). PARATYPES from Bonaventure County.

HIERACIUM SCABRUM, var. TONSUM Fernald & St. John in RHODORA, xvi. 182 (1914). TYPE from Magdalen Islands.

WILLDENOW'S SPECIES PLANTARUM AND
MICH AUX'S FLORA BOREALI-AMERI-
CANA: DATES OF PUBLICATION

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In 1891 Otto Kuntze published in the *Revisio Generum Plantarum*¹ a list of dates of publication for the several parts of Willdenow's edition of Linnaeus's *Species Plantarum*. Kuntze obtained the dates from Kayser's *Bücherlexicon* (1835) and with them established a date of publication later than that given on the title page for at least one part of each volume. In reference to parts 3 and 4 of Willdenow's volume III, which came into competition with Michaux's *Flora Boreali-Americana*, Kuntze said that he was not able to discover whether III³ (1803) appeared before or after Michaux's *Flora* (although he gave 1804 as the proper date), but that he gave Michaux precedence because the omission of a date in Willdenow occurred maliciously². The dates offered by Kuntz were subsequently adopted in the international Rules of Botanical Nomenclature.³

In an attempt to solve one of the many long-standing problems which have arisen because of the conflict of dates between Willdenow's volume III³ and Michaux's *Flora* I have found information concerning the dates of both works which seems worthy of notice.

In the *Intelligenzblatt der Allgemeine Literatur-Zeitung* (published in Halle and Leipzig), for November 4, 1797 (number 137) volume I part 1 is announced by the Berlin publisher Nauk, in the following manner:

In der Naukschen Buchhandlung zu Berlin sind folgende Bücher erschienen:

¹ O. Kuntze, *Rev. Gen.* i. cxxiv (1891).

² " . . . betr. III³ 1803 konnte ich nicht ermitteln, ob es vor oder nach Michaux' flora erschien und gebe ich Michaux den Vorzug, weil die Unterlassung der Datumangaben bei Willdenow freventlich geschah."

³ *Int. Rules of Botanical Nomencl.* Art. 45 (1935).

[entry no.] 4) Linée species plantarum exhib. plantas rite cognitatas ad gen. relatas cum differentiis, nomin. trivial. synonym. selectis, locis natal. sec. syst. sexuale digestas. Tom. I. edit. quarta post. Reichard. quinta cura Carl. Lud. Willdenow. Vol. I. p. I. 8 maj. auf. engl. Papr. 2 Rthlr. auf ord. Druckpr. 1 Rthlr. 14 gr.

Therefore 1797, as indicated on the title-page, and not 1798 as stated by Kuntze, is the correct date for volume I part 1.

In the *Intelligenzblatt* of the same journal for February 1, 1800 (number 16) volumes I and II are listed by Nauk:

Noch sind bey mir folgende Bücher verlegt:

[entry no.] 7) Linne, Carolia., species plantarum cura Willdenow. T. I und II. gr. 8 7 Rthlr. 18 gr.

Thus the date 1799 on the title page of volume II is undoubtedly correct.

In the *Intelligenzblatt* for January 7, 1801 (number 3) volume III is announced as having been published in 1800, as dated on the title page.

Bey *Nauck* in Berlin ist erschienen, und in jeder guten Buchhandlung zu bekommen:

[entry no. 2] Caroli a Linné Species plantarum cura Willdenow. Tom. III. 8 maj. 1800 2 Rthlr. 8 gr.

The entry which follows here, indicates that the notice above is for part 1 of volume III.

In the *Intelligenzblatt* for November 10, 1802 (number 208) may be found:

In meiner Buchhandlung ist so eben fertig geworden und zu bekommen:

[entry no.] 2) Linné Species plantarum cura Willdenow. Tom. III p. II da. 8 maj. 1802. I Rthlr. 16 gr.

After 1802 Nauk seems to have submitted no further lists of his newly published books. That he continued to publish is certain however, because in numerous later reviews he is cited as publisher⁴.

Although 1803 is the critical year and no notice of volume III part 3 of Willdenow's work could be found in the *Allgemeine*

⁴ For review of volumes I, II and III see *Allgem. Lit.-Zeit.* no. 304, 353-359 (Nov. 21, 1805). For review of volume IV see *Ergänzungsblatt zur Allgem. Lit.-Zeit.* no. 9, 65-71 (Jan. 20, 1807). For review of volume V see *op. cit.*, no. 37, 289-294 (April 3, 1810) and no. 38, 297-301 (April 5, 1810).

Literatur-Zeitung, the following entry from the publishing house of Levrault appeared in the *Intelligenzblatt* for Saturday, March 19, 1803 (number 59):

Bey den Gebrüdern *Levrault*, Buchhändlern in Paris und Strasburg sind folgende Bücher in Menge zu haben:

[entry on p. 491, third column of entire list]

Flora Boreali-Americana, sistens 2000 plantas, etc., c'est-à-dire, *Flore de l'Amérique septentrionale*, contenant plus de 2000 plantes, dont la plupart n'avaient jamais été décrites; par *Michaux*, auteur de la description des chênes, naturaliste voyageur dans l'expédition du citoyen Bodin, avec plus de 50 figures de plantes dessinées par Redouté et gravées par Plée; 2 vol. in 8.

Idem, 2 vol. in 4. papier-vélin.

Michaux's *Flora* must, therefore, have been published before March 19, 1803.

In the *Botanische Zeitung*, a journal founded in 1802 by the Botanical Society of Regensburg, there appeared in volume II, in the number for Monday, March 14, 1803, a notice from Berlin which is quoted here:

Berlin. Die Willdenowsche Ausgabe der Linnéischen *Specierum plantarum* wird nun schnell auf einander folgen, indem bereits der 3te Theil des 3ten Bandes unter der Presse ist, der mit *Syngenesia* anfängt, und sehr interessant werden dürfte.

Since on March 14, 1803, volume III part 3 was still in press, it could hardly have been published before March 19 of the same year, when Michaux's *Flora* was announced as having been already published, and for sale.

Kuntze's decision, to give Michaux precedence over Willdenow (volume III part 3 but not part 2) was therefore correct, although hardly for the reason which he gave. The dates for volume I and volume III, parts 1 and 2, might well be taken from the publisher's announcement rather than from the trade catalogue of at least 30 years later.

A tabulation of the pertinent dates of Willdenow's work follows:

Volume no.	Date given on title-page of volume.	Date given by Kuntze in Rev. Gen. i. cxxiv. (1890).	Date supplied in publisher's announcement.	Date of publisher's announcement.
I ¹	1797	1798	1797	Nov. 4, 1797
I ²	—	1798		
II ¹	1799	1799	1799 (by inference)	Feb. 1, 1800
II ²	—	1800		
III ¹	1800	1801 (to page 850)	1800	Jan. 7, 1801
III ²	—	1803 (to page 1470)	1802	Nov. 10, 1802
III ³	—	1804 (to page 2409)	1803 (by inference)	Mar. 14, 1803 (as in press).

GRAY HERBARIUM.

TWO ALBINO FORMS OF ECHINACEA FROM MISSOURI—In his revision of *Echinacea* Sharp¹ did not list or recognize any white-rayed forms of species within that genus. For the last ten years the writer has known of a white-rayed variant of *Echinacea pallida* Nutt., infrequently encountered on the limestone glades of eastern and southern Missouri. In 1941 Mr. William E. Liggett of University City, Missouri, called the writer's attention to another white-rayed form occurring in *Echinacea purpurea* (L.) Moench. Both forms are known to breed true.

Since apparently neither of these white-rayed variants has received recognition, they may be designated as color forms differing from the respective species in no essential morphological details other than color variation. It is a pleasure to associate the name of the discoverer with the following form.

ECHINACEA PURPUREA (L.) Moench, forma **Liggettii** Steyermark, forma nova—A forma typica differt ligulis albis. MISSOURI: highway 54, west of Niangua River, Dallas Co., transplanted to yard of Mr. William Liggett in University City, Saint Louis Co., July 9, 1940, *William E. Liggett 1* (TYPE, in Herb. Field Mus.).

The other variant may be called

ECHINACEA PALLIDA Nutt., forma **albida** Steyermark, forma nova—A forma typica differt ligulis albis et floribus disci luteis. MISSOURI: limestone glade on top of bluffs along Plattin Creek, T 38 N, R 6 E, sect. 7, Koester Springs at Koester, Saint Francois Co., June 4, 1941, *Steyermark 28797* (TYPE, in Herb. Field Mus.).

¹ Sharp, Ward M. Ann. Missouri Bot. Gard. 22: 84-95. 1935.